• Maximum of 20 solenoids can be powered by a single multi-pin connector.

• Up to 40 solenoids can be powered by means of a second multi-pin connector station.

• Left or right end connector adapters available.

• Maximum allowable coil amperage is 250 milliamps.

• Standard AC and DC voltage options available up to 240 volts.

• Current connection types available are: • 9, 15, and 25 pin Sub-D connectors. • 10, 16, 20, and 26 pin ribbon type connectors. • 24 pin AMP CPC connector.

• Washdown Sub-D connectors available (9, 15 and 25 pin) - designed to meet NEMA 4 and IP65 ratings.

• Flexibility to support remotely located stacks.

• Dielectric strength to ground in excess of 2000 volts.
82 Series MAConnect™ Remote Manifolds

- Easy hookup.
- Remote stacks are compatible with Sub-D and ribbon style connectors.
- Primary and remote stacks can operate 20 solenoids in any configuration with Sub-D connectors.
Specifications
82 Series Valve

Fluids:
Compressed Air or Inert Gases

Lubrication:
Not required. If used, select a medium aniline point lubricant (between 180°F and 210°F)

Safe Operating Temperature Range:
0°F to 120°F (-18°C to 50°C)

Pressure Range:
25 to 150 PSI (Internal Pilot, Sgl. Solenoid)
10 to 150 PSI (Internal Pilot, Dbl. Solenoid)
Vacuum to 150 PSI (External Pilot)
25 to 150 PSI (3 Position, Internal/External Pilot)

Electrical:
DC 12/24 Volt  1.8w to 5.4w
AC 120/60   Inrush current 10.9 Volt-amps (.09 amps)
    Holding Current 77 Volt-amps (.06 amps)
Maximum Coil Amperage - 250mA
Maximum Voltage - 240VAC
Dielectric Strength in Excess of 2000 Volts.
Recommended Mating Sub-D Cable Specifications
    3 Amp Current Rating per Conductor
    300 Volt RMS, 105°C Insulation

Amp CPC Connector Specifications

Receptacle: (Mounted in MAConnect™ adapter block)

• Series 1 Amp CPC Connector
• Shell size 23
• 24 Male pins (1.57mm diameter)
• Five key configuration

Recommended Plug:

• Amp part number 206837-1
• 5 key configuration
• Recommended receptacle contacts are size 16 type III+ (Accepts pin dia. 1.57mm)

Additional information can be obtained from Amp Catalog 82021
How to Order
82 Series MAConnect™

**82 A - X X - X X X - XX - D XX P - X XX**

Pilot Valve Options (see below)

### Valve Function
- **0** Base Only
- **A** Sgl. Sol. Sgl. Press.
- **C** Sgl. Sol. Dual Press.
- **D** Dbl. Sol. Dual Press.
- **E** 3 Pos. Closed Center
- **F** 3 Pos. Open Center
- **G** 3 Pos. Sgl. Press.
- **H** 3 Pos. Dual Press.
- **J** Sgl. Sol. Sgl. Press. Sol. on B End
- **K** Sgl. Sol. Dual Press. Sol. on B End
- **L** 3 Pos. Dual Press. Open Center
- **M** 3 Pos. Dual Press. Closed Center

### Exhaust and Electrical Options
- **0** Base Only
- **A** Plug-In
- **B** Plug-In w/ Light in Body
- **C** Plug-In w/ Pilot Exh. Out
- **D** Plug-In w/ Pilot Exh. Out and Pilot Exh. out main Exh.
- **E** Plug-In w/ Pilot Exh. Out and Pilot Exh. out Main Exhaust
- **F** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **G** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **H** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **I** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **J** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **K** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **L** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **M** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **N** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **O** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **P** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **Q** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **R** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **S** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **T** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **U** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **V** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **W** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **X** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **Y** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.
- **Z** Plug-In w/ Light in Body and Pilot Exh. out Main Exh.

### Port Size and Thread
- **Type In. and Cyl.**
  - **0** Valve Only
  - **B** 1/4 NPT
  - **C** 3/8 NPT
  - **D** 1/4 BSP
  - **E** 3/8 BSP
  - **T** 1/4 Universal Pilot
  - **U** 3/8 Universal Pilot
  - **M** Plug-In
  - **P** Plug-In w/ Diode
  - **E** Plug-In w/ M.O.V.

### Manifold Base Configurations
- **0** Valve Only
- **K** Standard Ports
- **L** Bottom Cylinder Ports
- **M** Bottom Inlet Port
- **N** Bottom Inlet Port and Cylinder Ports
- **P** Bottom and End Cylinder Ports
- **R** Bottom Cylinder and End Cylinder Ports w/ Bottom Inlet Port
- **S** Selector Base - Std. Side Ports
- **T** Bottom inlet available 1/4" only. For bottom o-ring ports, consult factory. For lights in base, consult factory.

### Pilot Valve Options
- **XX - D XX P - X XX**
- **TM** Muffled Exhaust
- **TP** Piped Exhaust
- **TU** Universal Pilot
- **D** Plug-in (Standard)
- **K** Plug-in w/ Diode
- **L** Plug-in w/ M.O.V.

### Electrical Connection
- **DA** Plug-in (Standard)
- **DK** Plug-in w/ Diode
- **DL** Plug-in w/ M.O.V.

### Additional Notes
- For negative commons, use mod number 1705 after model number.
How to Order
Adapters / End Plate Kit
MAConnect™ Adapter Assembly
M-82010 - XX - XX

09  9 Pin Sub-D  1  Internal Pilot Left End
10  10 Pin        2  External Pilot Left End
15  15 Pin Sub-D  3  Internal Pilot Right End
16  16 Pin        4  External Pilot Right End
20  20 Pin
24  24 Pin Amp CPC
25  25 Pin Sub-D
26  26 Pin

Leave Blank for NPTF Threads
P  BSPPL Threads
T  BSPTR Threads

Note: For washdown Sub-D connector use MOD 532M after model number.
Note: For Negative Commons (PNP) Use MOD 1705 After Model Number

MAConnect™ Adapter Assembly
(Required For Connecting To A Remote Stack)
M-82011 - XX - XX

09  9 Pin Sub-D  1  Internal Pilot Left End
10  10 Pin        2  External Pilot Left End
15  15 Pin Sub-D  3  Internal Pilot Right End
16  16 Pin        4  External Pilot Right End
20  20 Pin
24  24 Pin Amp CPC
25  25 Pin Sub-D
26  26 Pin

Leave Blank for NPTF Threads
P  BSPPL Threads
T  BSPTR Threads

Note: For washdown Sub-D connector use MOD 532M after model number.

MAConnect™ Fastening End Plate Kit
M-82012 - XX - 01 X

01  Internal Pilot Left End
02  External Pilot Left End
03  Internal Pilot Right End
04  External Pilot Right End

Leave Blank For NPTF Threads
P  BSPPL Threads
T  BSPTR Threads

Note: “01” should be used only when the Fastening End Plate Kit is ordered separately. When the kit is ordered with an assembly this number will change to indicate the number of valves in the stack. Refer to “Examples for Ordering” page.
Examples for Ordering MACConnect™

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Remote Stack

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<tr>
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Primary Stack

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</tr>
<tr>
<td>2</td>
<td>82A-BC-CK4-TM-DDAP-1DA</td>
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</tbody>
</table>
82 SERIES MACONNECT WITH AMP CPC CONNECTOR ON RIGHT END

NOTE:
ALL DIMENSIONS SHOWN ARE IN MILLIMETERS
82 SERIES MACONNECT WITH MULTI-PIN CONNECTOR ON RIGHT END

NOTE:
ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
Installation and Service Precautions:
A. Do not install or service MAC valves without first making sure both air and electrical power to the machine are off and that all air has been completely bled from the system.

B. MAC valves should only be installed and/or serviced by qualified knowledgable personnel who understand how the specific valve is to be pneumatically piped and electrically connected (where applicable). Flow paths through the valve are shown in the catalog and on the valve by use of ANSI or ISO type standard and graphic symbols. Do not install unless these symbols and the valve functions and operations are thoroughly understood.

C. Before service, maintenance, repair or cleaning, consult local distributor or factory for Parts and Operation Sheet and information on proper cleaning and lubrication agents. Do not subject MAC valves’ parts to any foreign substance including lubricants and cleaning agents not specifically recommended by MAC Valves, Inc.

D. MAC valves are never to be stepped on while working on a machine. Damage to the valve, or lines to the valve (either air or electrical lines) or accidental activating of a manual operator on the valve could result in a dangerous condition.

Warning:
Under no circumstances are MAC valves to be used in any application where failure of the valve to operate as intended could jeopardize the safety of the operator or any other person.
-Do not operate outside of the pressure range listed on valve label or outside of designated temperature range.
-Air supply must be clean. Contamination of valve can affect proper operation.
-Before attempting to repair, adjust or clean valve, consult catalog, parts and operation sheet, or factory for proper maintenance procedures, lubrication, and cleaning agents. Never attempt to repair or perform other maintenance with air pressure to valve.
-If airline lubrication is used, consult catalog, parts and operation sheet, or factory for recommended lubricants.